

# NEW PROGRAM PROPOSAL FORM

Sponsoring Institution(s):	<b>Lindenwood University</b>
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Program Title:

**Biological Sciences** 

Degree/Certificate: Bachelor of Arts (BA) in Biological Sciences

**Options:** 

Click here to enter text.

Delivery Site(s):

St. Charles Campus, St. Charles MO

CIP Classification: 260101

\*CIP code can be cross-referenced with programs offered in your region on MDHE's program inventory highered.mo.gov/ProgramInventory/search.jsp

Implementation Date:

Clic 20150 enter text.

Cooperative Partners:

Click here to enter text,

\*If this is a collaborative program, form CL must be included with this proposal

## **AUTHORIZATION:**

Dr. James Evans, President

Name/Title of Institutional Officer

Dr. Greg Anderson

636-949-4122

Person to Contact for More Information

Telephone



# STUDENT ENROLLMENT PROJECTIONS

Year	1	2	3	4	5
Full Time	7	5	4	3	3
Part Time	0	0	0	0	0
Total	7	5	3	3	3

Please provide a rationale regarding how student enrollment projections were calculated:

Projections are based on recent faculty cuts (a 15% reduction in staff) in the Department of Biological Sciences which will reduce the ability to sustain prior growth in the program. As a result of these cuts we expect the program enrollment numbers to level off or decline in the near future and return to the previous levels seen in 2011. Due to the reduced usefulness of a Bachelor of Arts degree in a science major, student numbers have been historically low, as most students are advised to pursue the Bachelor of Science degree. Prior to this staffing reduction enrollment in the Department of Biological Sciences showed an overall increase from 163 fulltime students in 2011 to 194 students in 2014, an increase of 19% in three years.

Provide a rationale for proposing this program, including evidence of market demand and societal need supported by research:

This minor change in the program essentially increases the required curriculum by only one course in the major and reduces the number of required electives by one course. It provides a more in depth education in the General Biology course sequence which enhances student understanding of upper level courses required for the Bachelor of Arts degree in Biological Sciences. This modification will not require any substantial changes in the Department but will, at the same time, provide a better foundation which will improve the success and educational goals and ambitions of the student. This enhanced curriculum should be attractive to a larger number of potential undergraduates.



A. Total credits required for graduation: 154

B. Residency requirements, if any: NA

C. General education: Total credits: 41

Courses (specific courses OR distribution area and credits):

Course Number	Credits	Course Title
	6	English Composition
	3	Communications
	9	Humanities
	3	Fine Arts
	3	History & Government
	9	Culture & Civilization
	6	Social Sciences
	2	Freshman Experience

D. Major requirements: Total credits: 113

Course Number	Credits	Course Title
BSC 22700	4	Human Anatomy and Physiology I
BSC 22800	4	Human Anatomy and Physiology II
BSC 24000	4	Introduction to Biological Diversity (4)
BSC 24400	4	Introduction to Cellular and Molecular Biology (4)
BSC 24800	4	Introduction to Ecology and Evolution (4)
BSC 28500	1	Methods and Writing for Biology (1)
BIO 32000	4	Plant Biology
BSC 32400	4	Animal Biology
BSC 40400	4	Cell Biology
BSC 40800	4	Genetics
BSC 46400	3	Evolution
BSC 46500	4	Ecology
BSC 48500	1	Biology Seminar
BSC 48600	1	Biology Synthesis
CHM 23000	. 3	General Chemistry I
CHM 23100	3	General Chemistry 2

CHM 23200	3	General Chemistry 3 (3)
CHM 24100	1	General Chemistry 2 Laboratory (1)
CHM 24200	1	General Chemistry 3 Laboratory (1)
ESC 10000	4	Physical Geology with Lab
ESC 11000	3	Introductory Meteorology
ESC 11100	1	Meteorology Lab
MTH 15100	3	College Algebra
MTH 15200	3	Pre-Calculus: Elementary Functions
MTII 24100	3	Statistics for Natural Science (3)
PHY 25100	4	Introductory Physics I
PHY 25200	4	Introductory Physics II
PHL 26500	3	Philosophy of Science
EDU 10000	3	Orientation to Educational Experiences
EDU 20200	3	Psychology of Teaching and Learning
EDU 21501	1	Teaching Education Seminar
EDU 30700	3	Teaching Reading in the content Areas
EDU 32100	3	Middle/High School Classroom Teaching and Technology
EDU 33000	3	Secondary Methods of Teaching Science
EDU 34100	3	Education of the Exceptional Child
EDU 38000	3	Pre=Student Teaching Practicum
EDU 40400	3	Advanced Measurement and Evaluation to Enhance Learning
EDU 41000	3	Student Teaching

E. Free elective credits:

0

(Sum of C, D, and E should equal A.)

F. Requirements for thesis, internship or other capstone experience: none

G. Any unique features such as interdepartmental cooperation: none



# PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS

Institution Name

Lindenwood University

Program Name

BA in Biological Sciences

Date 16 December, 2014

(Although all of the following guidelines may not be applicable to the proposed program, please carefully consider the elements in each area and respond as completely as possible in the format below. Quantification of performance goals should be included wherever possible.)

## 1. Student Preparation

Any special admissions procedures or student qualifications required for this program
which exceed regular university admissions, standards, e.g., ACT score, completion of
core curriculum, portfolio, personal interview, etc. Please note if no special preparation
will be required.
No special requirements above those required for admission to the University are

required for students pursuing this degree program.

Characteristics of a specific population to be served, if applicable.
Biology majors that do not intend on pursuing pre-professional or graduate school
opportunities generally opt for the Bachelor of Arts degree in Biological Sciences.
Students that intend to pursue pre-professional or graduate school opportunities are
generally encouraged to pursue the Bachelor of Sciences degree.

## 2. Faculty Characteristics

- Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate.
   All fulltime faculty in the Department of Biological Sciences must have a terminal degree (Ph.D) in their field.
- Estimated percentage of credit hours that will be assigned to full time faculty. Please use the term "full time faculty" (and not FTE) in your descriptions here.

  One hundred percent of the Biological Science (BSC) required courses in the major and those numbered above 200 will be assigned to full time faculty.
- Expectations for professional activities, special student contact, teaching/learning innovation.
   Faculty are expected to maintain currency in their field, and update coursework and labs as needed. Small class sizes and labs taught by the lecture instructor ensures close contact with students to maximize their educational experience.

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#### 3. Enrollment Projections

- Student FTE majoring in program by the end of five years.
   Student enrollment in this program have generally been low due to the fewer number of opportunities for students with a BA degree in the sciences. Unfortunately, a recent 15% reduction in faculty staffing levels in the Department of Biological Sciences will likely result in an even further reduction from current enrollment levels back to lower levels last seen in 2011.
- Percent of full time and part time enrollment by the end of five years.
   One hundred percent of our students are full time, we currently have no part time students enrolled and have not had any for at least the last 5 years.

## 4. Student and Program Outcomes

- Number of graduates per annum at three and five years after implementation.
   Over the last 5 years, the number of graduates has ranged from a low of 0, to a high of 5.
   Based on projected reduced enrollment combined with lower staffing levels, we expect graduate numbers to revert back to previous lower numbers of graduates in three years, and stabilize at those lower levels at the five year mark.
- Special skills specific to the program. N/A
- Proportion of students who will achieve licensing, certification, or registration.
   N/A
- Performance on national and/or local assessments, e.g., percent of students scoring above
  the 50th percentile on normed tests; percent of students achieving minimal cut-scores on
  criterion-referenced tests. Include expected results on assessments of general education
  and on exit assessments in a particular discipline as well as the name of any nationally
  recognized assessments used.
  Data not tracked by institution.
- Placement rates in related fields, in other fields, unemployed. Data not tracked by institution.
- Transfer rates, continuous study. Data not tracked by institution.

# 5. Program Accreditation

 Institutional plans for accreditation, if applicable, including accrediting agency and timeline. If there are no plans to seek specialized accreditation, please provide a rationale. There is no accreditation agency for Biology Programs. The University is fully accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools

# 6. Alumni and Employer Survey

- Expected satisfaction rates for alumni, *including timing and method of surveys*. Data not tracked by institution.
- Expected satisfaction rates for employers, including timing and method of surveys.
   Data not tracked by institution.

## 7. Institutional Characteristics

• Characteristics demonstrating why your institution is particularly well-equipped to support the program.

This is only a minor modification to a successful program and Department that has been well established for many decades and has an outstanding track record at Lindenwood University.